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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/938,299	08/23/2001	Martin Wildeman	TCZ-39	1052
7590 12/05/2003				
Timothy A. Cassidy Dority & Manning Attorneys at Law, P.A. P.O. Box 1449 Greenville, SC 29602			EXAMINER BEFUMO, JENNA LEIGH	
			ART UNIT 1771	PAPER NUMBER

DATE MAILED: 12/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/938,299	WILDEMAN, MARTIN	
	Examiner	Art Unit	
	Jenna-Leigh Befumo	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-17 and 27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-17 and 27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The Amendment submitted on September 5, 2003, has been entered. Claims 1 – 10 and 18 – 26 have been cancelled. Claims 13 and 17 have been amended and claim 27 has been added. Therefore, the pending claims are 11 – 17 and 27.
2. The 35 USC 112 2nd paragraph rejections set forth in sections 7 – 9 of the previous Office Action are withdrawn based on the Applicant's arguments (Response, page 4).
3. The 35 USC 103 rejection based on Dischler et al. (6,260,247) set forth in sections 12 and 13 of the previous Office Action are withdrawn since Dischler et al. produces a design by producing a highly napped region and a lightly napped region, and not a highly napped region and an unnapped region.
4. The 35 USC 103 rejection to claim 17 based on Shimizu et al. (4,4743,483) is withdrawn since the Amendment now requires the warp knitted fabric to have a yarn which is a monofilament yarn having a size of at least 10 denier, and Shimizu teaches using multifilament yarns.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
6. Claims 11 – 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu et al. in view of Understanding Textiles, Fourth Edition (Phyllis G. Tortora, pages 354 - 355).

The features of Shimizu et al. and Tortora have been set forth in section 11 of the previous Office Action. Claims 11, 12, and 14 – 16 are rejected for the reason of record. Claim 13 is now rejected based on the fact the final product produce by the method limitations in claim

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13 would not have any sizing coated on the finished product, and the product taught by Shimizu et al. would also not have any sizing.

7. Claims 11 – 17 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hepfinger in view of Shimizu et al.

Hepfinger discloses a warp knitted fabric having at least a three-bar construction wherein the pile yarns are made from multifilament yarns producing the technical back of the fabric and the ground yarns are made from a monofilament yarn producing the technical front of the fabric (abstract). The warp knit fabric may be a tricot knit or a raschel knit fabric (column 2, lines 11 – 14). The pile yarns are made from microdenier filament yarns wherein the individual filaments are 1.1 denier or less (column 1, lines 40 – 41) and the total denier of the yarn is at least 50 denier (column 2, lines 62 – 64). The ground yarns are made from a monofilaments yarn having a denier of at least 10 without exceeding the denier of the pile yarns (column 2, lines 64 – 67). Finally, the pile yarns are brushed or napped to produce a plush surface (column 1, lines 47 – 50). Hepfinger fails to teach producing a pattern napped surface by producing unnapped and napped regions.

The features of Shimizu et al. have been set forth in the previous Office Action. Shimizu et al. discloses a method of producing a pattern in the surface of a napped fabric by impinging a high-pressure fluid jet stream on part of the fiber sheet to produce a pattern (column 1, lines 55 – 60). The fluid stream pushes the raised fibers into the base of the fabric and produces a reverse nap on the opposite side of the fabric (column 3, lines 49 – 55). This process can be used to produce various designs in the raised surface of the fabrics (column 4, lines 52 – 54). Therefore, it would have been obvious to one of ordinary skill in the art to produce a pattern as taught by Shimizu et al. on the napped surface of the fabric taught by Hepfinger to create a fabric which is

can have various designs and textures and is aesthetically pleasing to consumers when used as apparel or upholstery fabric. Therefore, claims 11 – 13 and 15 – 17 are rejected.

Further, Hepfinger fails to teach the number of rows per inch formed in the knitted fabric. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to choose the claimed rows per inch, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454, 105 USPQ 233 (CCPA 1955). Further, one of ordinary skill in the art would be motivated to optimize the number of rows so that the ground yarns are sufficiently covered by the pile yarns while limiting the number of rows to keep manufacturing costs as low as possible. Thus, claims 14 and 27 are rejected.

Response to Arguments

8. Applicant's arguments filed September 5, 2003 have been fully considered but they are not persuasive. The Applicant argues that since Shimizu naps the entire surface of the fabric prior to the water jet treatment then the fabric cannot be considered unnapped (Response, page5). However, the final product taught by Shimizu is the fabric produced after the napping step and the water jet treatment. The water jet treatment applies water jets to discrete sections of the fabric and pushes the raised fibers in that section back into the base of the fabric. Thus, the regions would no longer have a napped or plush surface and would therefore, be unnapped, as claimed by the Applicant. In other words, even though the method steps used by the Applicant and Shimizu to produce the napped and unnapped regions are different, the final product, in both cases, would have a warp knit fabric with napped regions and unnapped regions.

Further, Shimizu teaches the raised fibers in the regions which are water treated are pushed through the base of the fabric and produce a reverse nap pattern on the opposite side of the fabric. Thus, the opposite surface of the fabric would have raised fibers from the first surface of the fabric, forming plush or napped regions on the back of the fabric as well as unnapped regions in the areas of the fabric which were not water jet treated. Thus, the back surface created by Shimizu would also read on the product claimed by the Applicant.

Further, it is noted that the product as claimed by the Applicant does not specifically define the structure of the napped and unnapped surface, or require that the back side of the fabric not have a napped surface at all. Hence, the Examiner has interpreted napped regions as any region where a plush pile surface is produced. And the term unnapped is interpreted to be any region which does not have a raised pile surface, regardless of how it was produced. In fact, the Applicant's fabric is entirely napped on the first surface. It is the Applicant's specific fabric treatment which prevents areas of the fabric from producing a plush pile. Further, the Applicant does not recite in the independent claims, any limitations with regards to how the unnapped regions are produced, or the exact structure of the unnapped regions. Therefore, Shimizu reads on the claims as recited, since the final product of Shimizu produces napped regions and unnapped regions in a warp knit fabric as claimed. The rejections are maintained.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenna-Leigh Befumo whose telephone number is (703) 605-1170. The examiner can normally be reached on Monday - Friday (8:00 - 5:30). Approximately December 31st, the examiner's telephone number will change to (571) 272-1472.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Jenna-Leigh Befumo
November 28, 2003



CHERYL A. JUSKA
PRIMARY EXAMINER